

**St. Tammany FD #9
Minimum Tanker Specifications
3000 Gallon/500 GPM**

3000 GALLON TANKER SPECIFICATIONS

GENERAL INFORMATION

The proposed apparatus will be constructed to withstand the severe and continuous use encountered during emergency firefighting services. The apparatus shall be of the latest type, carefully designed and constructed with due consideration to the nature and distribution of the load to be sustained. These specifications detail the proposal for general design criteria of cab and chassis components, aerial device (if applicable), fire pump and related components (if applicable), water tank (if applicable), fire body, electrical components, painting, and equipment.

All items of these proposal specifications will conform to the National Fire Protection Association Pamphlet No. 1901, latest edition. The manufacturer will furnish satisfactory evidence of our ability to construct, supply service parts and technical assistance for the apparatus specified. The proposed chassis will be certified as conforming to all applicable federal motor vehicle safety standards (FMVSS) in effect at the date of contract. This will be attested to by the attachment of a FMVSS certify caution label on the vehicle by the manufacturer, who will be recognized as the responsible final manufacturer.

GENERAL CONSTRUCTION

The proposed apparatus, assemblies, subassemblies, component parts, etc., will be designed and constructed with the due consideration to the nature and distribution of the load to be sustained and to the general character of the service to which the apparatus is to subject when placed in service. All parts of the apparatus will be designed with a factor of safety, which is equal to or greater than that which is considered standard and acceptable for this class of equipment in firefighting service. All parts of the proposed apparatus will be strong enough to withstand general service under full load. The apparatus will be so designed that the various parts and readily accessible for lubrication, inspection, adjustment and repair. The apparatus will be designed and constructed, and the equipment so mounted, with due consideration to distribution of the load between front and rear axles that all specified equipment, including a full complement of specified ground ladders, full water tank, loose equipment, and firefighters will be carried without overloading or injuring the apparatus

STEPPING, STANDING, & WALKING SURFACES

All stepping, standing, and walking surfaces on the body will meet NFPA #1901 anti-slip standards. Aluminum tread plate utilized for stepping, standing, and walking surfaces will be Alcoa No-Slip type. This material will be certified to meet the NFPA #1901 standard. Upon request by the purchaser, the manufacturer will supply proof of compliance with this requirement. All vertical surfaces on the body, which incorporate aluminum tread plate material, will utilize the same material pattern to provide a consistent overall appearance.

CAB SAFETY SIGNS

The following safety signs shall be provided in the cab:

A label displaying the maximum number of personnel the vehicle is designed to carry shall be visible to the driver.

“Occupants must be seated and belted when apparatus is in motion” signs shall be visible from each seat.

“Do Not Move Apparatus When Light Is On” sign adjacent to the warning light indicating a hazard if the apparatus is moved (as described in subsequent section).

A label displaying the height, length, and GVWR of the vehicle shall be visible to driver. This label shall indicate that the fire department must revise the dimension if vehicle height changes while vehicle is in service.

CHASSIS DATA LABELS

The following information shall be on labels affixed to the vehicle:

Fluid Data

Engine Oil

Engine Coolant

Chassis Transmission Fluid

Pump Transmission Lubrication Fluid

Pump Primer Fluid (if applicable)

Drive Axle(s) Lubrication Fluid

Air Conditioning Refrigerant

Air Conditioning Lubrication Oil

Power Steering Fluid

Front tire cold pressure

Rear tire cold pressure

Chassis Data

Chassis Manufacturer

Production Number

Year Built

Month Manufactured

Vehicle Identification Number

Manufacturers weight certification:

Gross Vehicle (or Combination) Weight Rating (GVWR or GCWR)

Gross Axle Weight Rating, Front

Gross Axle Weight Rating, Rear

MINIMUM CHASSIS SPECIFICATIONS

2005 or Newer Commercial Cab Chassis

Diesel Engine

Minimum 250 Horsepower

150,000 Miles or Less

Automatic Transmission

One Man Air Ride Diver Seat

1-Man Passenger Seat

52,000# Total GVW

12,000# Front GVW

40,000# Rear GVW

High Gloss Polyurethane Paint in L3781EB Viper Red

Dual Chrome Air Horns Mounted on Chassis

West Coast Style Mirrors

Wheels to be Painted Viper Red

Stainless Steel Wheel Covers

All Tires to be New Tubeless Design

Air Conditioning

The apparatus will be fully inspected by trained technicians to make sure that it is in fire service condition. All fluids and filters (Oil, Transmission, Air, Etc.) shall be changed and inspection of the belts, hoses, engine and drive train for any possible leaks or damages. All glass, mirrors, seats, etc. will be inspected and will be in good or like new condition.

REAR MUD FLAPS

Mud flaps shall be made from black hard rubber and shall be installed at the rear of the body fenders.

MASTER BATTERY SWITCH

A heavy duty on/off single battery master disconnect switch shall be mounted in the cab within easy reach of the driver. The master battery switch shall be wired between the starter solenoid and the remainder of the electrical loads on the apparatus. A green "Battery on" indicator light, visible from the driver's position shall be provided.

SEMI-ELLIPTICAL WATER TANK –3000 GALLON

The tank shall be a low-profile design tank for a low center of gravity constructed of high grade 7 Gauge 3/16" mild steel material and meet all NFPA requirements. The tank shall be semi-elliptical in design. The booster tank shall be 216 inches long and 72 inches wide which shall total to 3000-gallon capacity. There shall be ten (10) inches from semi oval bend to the center portion of tank where man ways are located, this flat area where man way entrances are shall be 52" in width and run length of tank. The tank floor structure shall be a total of 99" wide with a 13 1/2" extended section on each side of the tank compartment for mounting of accessories such as high side compartments, dump tank racks, etc. The entire booster tank is to be manufactured of high grade 7 gauge coated steel material; this includes tank front, rear and side walls, floor, roof, man way compartment lids, and baffles. The tanks baffles are designed for no compartment to exceed the NFPA requirement of 42"x42". All baffles shall be set 1 1/2" off of the tank floor and welded 100 % to the side wall to insure water is properly restrained.

TANK SUB FRAME

The entire sub frame of tank is manufactured using 10" channel iron long sills and 3" channel iron cross sills. The cross sills, running from left to right of tank are on 16" center. The booster tank is fastened to frame by using 3" channel straps with grade 8 frame bolts. There shall be man ways in the top of tank for easy tank entrance. There shall be removable lids over each compartment for entrance into the tank for inspection. Each lid is drilled and tapped so that each lid is removable. Lids are fastened with stainless steel bolts to prevent corrosion.

VENT/OVERFLOW

A 4" pipe over flow shall exit the excess water behind the rear axles. The overflow pipe protrudes upward approximately 3" into a fill tower box on top of tank. Overflow box is also manufactured high grade 7 gauge coated steel material. There shall be a thief hatch with automatic vent provided for adequate venting during dumping operations.

NFPA LADDER

There shall be a NFPA approved ladder constructed of high grade 1 1/2" steel tubing for tank roof access mounted on left rear of tank. Ladder shall have skid resistant rungs and be painted to match chassis.

TANK PAINT

When all accessories are fitted to tank, and all welding work is completed, the components are removed and the complete exterior of the tank is sand blasted. The external portions of tank shall be painted in high quality poly urethane paint to match the apparatus chassis.

INTERIOR TANK COATING

Tank lids shall be removed and inside of tank shall be sand blasted using premium grade blasting sand. Tank shall be then be coated with PPG AMERCOAT industrial coating, using a two-coat process for rust prevention.

TANK WARRANTY

Tank shall have a Lifetime Warranty from Apparatus Manufacturer.

TANK LEVEL GAUGES

There shall be one (1) Class 1 tank level gauges installed on apparatus at pump panel and at rear of tank. Level gauges shall indicate the liquid level on an easy to read display and show 9 levels of indication. Each tank level gauge system shall include:

One (1) pressure transducer shall be mounted on the outside of the tank. All sealed foam tanks require a second transducer. One (1) set of weather resistant connectors, connecting to the digital display, to the pressure transducer and to the apparatus power.

3" GATED TANK INLET/OUTLETS

Two (2) 3" direct tank inlet/outlets shall be installed on the apparatus, one on the lower right rear and left rear corner of the tank. The Inlet/outlets shall be gated with a fire service 3" ball valve with a 30-degree turn down with 3" cap and chain.

10" NEWTON DUMP – REAR CENTER

One (1) 10"x10" Newton Quick Flow Dump Valve shall be installed with the Newton 6000SW swivel chute and model 4036 manual 24" telescopic extension on the apparatus booster tank. The valve shall be bolted using high grade fasteners to the tank walls at location as follows: rear center. The rear dump valve shall extend approximately 2" past the rear tailboard for dumping purposes. The dump valve setup shall be capable of discharging the water tank contents at a rate of at least 1800 G.P.M.

There shall be dual electric controls provided for the Newton dump valve, one set in the rear and one set in the cab.

DRIVERS SIDE COMPARTMENTATION

One (1) low side compartment, with a vertically hinged single door, forward of the rear wheels. Compartment dimensions 26" High x 24" deep x 36" Wide.

One (1) low side compartment, with a vertically hinged single door, rearward of the rear wheels. Compartment dimensions 26" High x 24" deep x 36" Wide.

PASSENGER SIDE COMPARTMENTATION

One (1) low side compartment, with a vertically hinged single door, forward of the rear wheels. Compartment dimensions 26" High x 24" deep x 36" Wide.

One (1) low side compartment, with a vertically hinged single door, rearward of the rear wheels. Compartment dimensions 26" High x 24" deep x 36" Wide.

COMPARTMENT DOORS

The compartment doors shall be flush type with the outer skin fabricated from 1/8" (5052 H32) aluminum. The door skin shall have a formed flange on one (1) side used as a hinge mounting flange. The door skin shall have reinforcing channels welded internally

which accommodate the inner door pan mounting. The 2" thick compartment doors shall reduce the overall specified compartment depth by 2". All horizontally hinged doors shall be 1" thick to provide additional compartment storage area.

HINGES

Hinges shall be full length polished stainless steel piano type. The hinges shall be mounted with stainless steel hardware.

DOOR SEALS

Enclosed body compartment doors shall be equipped with closed cell gasket. The gasket material shall be EPDM to provide a gasket resistant to weather, temperature extremes, and aging.

DOOR LATCHES

Door latches shall be automotive type mechanism or equal. Latches shall be stainless steel half moon style handles for ease of operation even with gloves on.

SWEEP-OUT COMPARTMENT FLOORS

Compartment floors shall be welded to the compartment walls and have a sweep out design for easy cleaning. Compartments with hinged doors shall have the door opening flanges bend down to produce the sweep-out design.

ZOLOTONE COATING

Each compartment shall be coated on the inside with Zolotone industrial coating for skid and scratch resistance.

FOLDING DUMP TANK

The apparatus shall have a rack capable of containing a 3500-gallon Fol-Da-Tank dump tank located on right side of apparatus. This rack shall be a fold down style rack and be constructed of high-grade steel tubing. This rack shall have a dual polished latch system. This rack shall have a gas shock easy lift system on door with dual gas shocks for ease of operation. The sides and ends of this rack shall be filled with polished aluminum tread plate for aesthetic purposes as well as folding tank protection.

SIDE STORAGE RAIL

There shall be a 10" High x 216" Long side rail running the length of the tank on driver side to form an open top hose storage compartment. Rail shall be constructed of high grade 1 1/2" steel tubing and be sheeted on outside and front with polished aluminum diamond plate.

HARD SUCTION RACK

There shall be a hard suction rack mounted on the driver side of the tank above the 10" side rail for hard suction hose. This rack shall be constructed of polished aluminum diamond plate material and be built in a tray design. Rack shall have spring type latches for hose retention. The rack shall be capable of holding 2-10' sections of 4.5" suction hose and barrel strainer.

REAR TAILBOARD

Entire tailboard sub-frame is formed and constructed of 3" channel iron. Tailboard is designed to accommodate a 1000 lb. Load. Tailboard sub-frame is sandblasted and primed with epoxy primer and then finish painted. Frame is covered with a fitted aluminum diamond plate covering for anti skid purposes. Tailboard dimensions are approximately 12" deep x 96" wide.

SIDE BODY FENDER

One side body fender shall be installed on each side of body between front and rear compartments and over wheel well area. Fender shall be manufactured of .125 polished aluminum diamond plate.

Fenderwells shall be trimmed with black windlace upon completion.

NFPA FIRE SERVICE RATED FIRE PUMP AND COMPONENTS- HALE AP50 500

1. The pump shall be of size and design to mount on the chassis rails of a commercial and/ or custom truck chassis, and have the capacity of 500 gallons per minute as NFPA-1901 rated performance requirements.
2. The entire pump shall be assembled and tested at the pump manufacturer's factory.
3. The pump shall function by the utilization of a driveline from the truck transmission PTO. The engine shall provide sufficient horsepower and RPM to enable the pump to meet and exceed its rated performance.
4. The entire pump shall be hydrostatically tested to a pressure of 500 PSI. The pump shall be tested at the pump manufacturer's facility to performance specifications as outlined by NFPA-1901 rated performance requirements. The pump shall be free from objectionable pulsation and vibration.
5. The pump body and related parts shall be constructed of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI (2,069 bar). All metal moving parts in contact with water shall be manufactured of high-quality bronze or stainless steel. Any pump utilizing castings made of lower tensile strength cast iron not acceptable.
6. The pump body shall vertically split on a single plane for ease of removal of the impeller assembly. The entire pump shall remove easily without disturbing the piping or mounting of the plumbing and manifolding in chassis.
8. Ball bearings support the pump shaft for minimum deflection, and maximum rigidity. The ball bearings shall be heavy-duty, deep groove, bearings in the gearbox and splash lubricated.
9. The pump shaft shall have: one (1) mechanical seal on the suction (inboard) side

of the pump. The mechanical seal shall be spring loaded, maintenance-free and self-adjusting. All mechanical seal construction shall contain a silicon carbide sealing ring, stainless steel coil spring, a Viton® rubber cup, and a tungsten carbide seat.

10. The pump impeller shall be manufactured of hard fine grain bronze of mixed flow design. Once manufactured, the impeller shall be accurately machined and balanced. The vanes of the impeller intake eyes shall be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.

11. The pump impeller shall have clearance rings manufactured of bronze, easy to remove, without replacing impeller or pump volute body.

12. The pump shaft shall be manufactured of heat-treated, electric furnace, corrosion resistant stainless steel for longer shaft life. The pump shaft shall be sealed with a double-lip oil seal to keep road dirt and water out of gearbox.

GEARBOX

The pump gearbox shall be of sufficient size to withstand the full drive load imposed by the pump system. The drive unit shall be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature.

The gearbox drive shaft shall be of heat-treated chrome nickel steel.

All drive and pump gears shall be of the highest quality electric furnace chrome nickel steel. All bores shall be ground to size, teeth integrated and hardened, to create an extremely accurate gear for long life, smooth, quiet running, and higher load carrying capability. An accurately cut Helical design shall be provided. (There will be No exceptions.)

The pump ratio shall be selected by the apparatus manufacturer to give maximum performance with the engine and transmission selected.

All apparatus' built with automatic transmissions shall be provided three (3) green warning lights to indicate to the operator(s) when the pump has completed the shift from road to pump position. The warning lights will be located as stated: two (2) in the truck driving compartment and one (1) on the pump operator's panel adjacent to the throttle control. For manual transmissions, one (1) green warning light will be provided for the driving compartment. All lights shall have appropriate identification/instruction plates.

PUMP PANEL

The pump panel shall be constructed of polished aluminum diamond plate and be mounted below tank rail on driver side front corner. Pump panel shall have all components as listed below and have lighting.

BALL VALVES

All valves shall be brass fire service valves.

PIPING AND MANIFOLDS

All the piping and pump body attached manifolding shall be stainless steel. The complete piping system shall be designed to direct mount all 1-½" or larger ball valves onto the pump body or stainless steel manifolds attached directly to the pump body.

All NPT pipe thread connections larger than ¾" connections shall be avoided in the construction of the plumbing system. The following valves shall have groove connection: rear discharge, tank fill, all 2" and 2-½" (5.08 and 6.35cm) preconnect valves. The tank to pump 3" (7.62 cm) valve shall have a hose barb connection.

INSTRUMENT PANEL

The Instrument Panel shall be polished material and contain the following:

One (1) 4½" Intake Master Gauge

One (1) 4½" Discharge Master Gauge

One (1) MC Tank Water Level Gauge

One (1) Panel Light Switch

One (1) Throttle Control

The instrument panel, all controls, and gauges shall be in an under-side rail pump house behind cab of truck and below front rail of booster tank. Pump panel shall have a removable face and be constructed of diamond plate aluminum.

TANK FILL

There shall be a 2.0" pump to tank fill stainless steel valve.

4.5" STEAMER INLETS

Two (2) 4.5" (12.7 or 15.24cm) steamer inlets will be provided, one (1) on the left side and one (1) on the right side. Both inlets shall have long handle chrome vented caps and a screen.

TANK TO PUMP

The tank to pump valve shall be 3" inline, installed between the water tank and the pump. The valve shall be a quarter turn ball type, fixed pivot design and be constructed of stainless steel. The valve shall be controlled at the side pump panel with a chrome handle.

2-½" LEFT SIDE DISCHARGE

One (1) 2-½" (6.35cm) discharge with a brass valve shall be located on the left side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. A chrome vented cap and chain shall also be supplied. Valve shall be controlled at the side pump panel with a chrome handle

2-½" RIGHT DISCHARGE

One (1) 2-½" (6.35cm) discharge with a brass valve shall be located on the right side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. A chrome vented cap and chain shall also be supplied. Valve shall be controlled at the side pump panel with a chrome handle.

THROTTLE

There shall be a throttle on pump panel for pump operation.

PUMP GAUGES

All gauges shall be manufactured by Class One Products. They shall be liquid filled to keep the dial from pulsating and also to prevent condensation from forming inside the gauges. The master suction (inlet) gauge provided shall be from -30 to 400 PSI. Each individual discharge gauge provided shall be from 0 to 400 PSI.

Two (2) 4.5" Master Gauges (Suction & Pressure)

One (1) 2.5" discharge gauge for each 1.5" or larger discharge

Note: All 2.5" gauges will have color coded bezels to match the control handle labels.

MASTER PUMP DRAIN

The pump shall be equipped with a Class 1 Master Pump drain to allow draining of the lower pump cavities, volute and selected water carrying lines and accessories. The drain shall have an all-brass body with a stainless-steel return spring.

STEPPING SURFACES

All designated exterior stepping surfaces shall be provided with an aggressive skid-resistant surface. The steps shall be in accordance with current NFPA requirements.

DOT MARKER LIGHTS AND REFLECTORS

Cab marker lights and signaling devices shall be as provided on the commercial chassis cab from the original chassis manufacturer. FMVSS reflectors shall be also be provided as required.

LICENSE PLATE LIGHT

One (1) license plate light shall be provided above the mounting position of the license plate. The light shall be clear in color.

TAIL, STOP, TURN AND BACK-UP LIGHTS

One (1) LED red combination tail and stop lights shall be mounted one each side at the rear of the body.

One (1) white halogen back-up lights, shall be mounted one each side on a vertical plane with the turn/tail/stop signals. These lights shall activate when the transmission is placed in reverse gear.

CAB PERIMETER SCENE LIGHTS

There shall be two (2) Techniq E-100 white LED lights with grommets provided, one (1) for each cab door.

PUMP PANEL PERIMETER LIGHTS

There shall be two (2) Techniq E-100, white LED lights with grommets provided under the pump panel compartment, one (1) each side.

BODY PERIMETER SCENE LIGHTS

There shall be two (2) Techniq E-100, white LED lights with grommets provided under at the rear step area of the body, one (1) each side shining to the rear.

All ground lights shall be wired to the parking brake signal of the chassis and activate when the chassis air brakes.

12 VOLT BODY ELECTRICAL SYSTEM

All electrical lines in the body shall be protected by automatic circuit breakers, conveniently located to permit ease of service. Flashers, heavy solenoids and other major electrical controls shall be located in a central area near the circuit breakers.

All lines shall be color and function coded every 3", easy to identify, oversized for the intended loads and installed in accordance with a detailed diagram. A complete wiring diagram shall be supplied with the apparatus. Wiring shall be carefully protected from weather elements and snagging. Heavy duty loom shall be used for the entire length.

Grommets shall be utilized where wiring passes through panels. In order to minimize the risk of heat damage, wires run in the engine compartment area shall be carefully installed and suitably protected by the installation of heat resistant shielded loom. All electrical equipment shall be installed to conform to the latest federal standards as outlined in NFPA 1901.

NFPA LIGHTING PACKAGE

The following warning light package shall include all of the minimum warning light and actuation requirements for the current revision of the NFPA 1901 Fire Apparatus Standard.

NFPA ZONE A, UPPER

A Whelen Inner Edge LED warning light bar shall be furnished and rigidly mounted in the cab windshield of apparatus.

*Note- A truck measurement shall be taken prior to wiring of unit and if a roof mounted Whelen JE2NFPA 56" Low Profile light bar will keep truck height under 9'7" it shall be used in place of the Inner Edge.

NFPA ZONE C, UPPER

Two (2) Whelen L31HF LED lights shall be mounted one (1) each side at the rear of the body. A Whelen LED red light shall be provided on the left side and a Whelen LED amber light shall be provided on the right side.

8 WHELEN LED ZONE LIGHTS

There shall be eight (8) Whelen "ION" LED zone lights mounted on apparatus per NFPA Zone light requirements. The lights shall be arranged on truck as follows:

Two (2) in front grill
Two (2) on front fenders
Two (2) behind rear wheels
Two (2) on rear tailboard

FOUR (4) SCENE LIGHTS

There shall be four (4) Whelen M6 LED area scene lights, one mounted on each side of apparatus side facing and two rear facing on rear stanchions. Lights shall have switches and labels mounted in cab for easy usage. The scene lights shall be mounted in Whelen flanges provided with chrome finish.

FOUR CUBE LIGHTS

There shall be four (4) LED cube style lights provided on the apparatus, two front and rear of tank on aluminum stanchions for additional scene lighting.

BACK-UP ALARM

A solid-state back-up alarm shall be provided and installed at the rear of the apparatus under the tailboard. The back-up alarm shall activate automatically when the transmission is placed in reverse gear and the ignition is "on".

ONE (1) WHELEN 295SDA 100 WATT

There shall be one (1) Whelen 95 SDA full feature siren provided. The siren shall have wail, yelp, hi-low and air horn features along with manual control and radio rebroadcast. There shall be a microphone hardwired to the unit for the PA function. The unit shall be mounted in the cab.

ONE (1) SIREN SPEAKER

There shall be one (1) 100-watt speaker mounted behind the front bumper and wired to the siren.

PUMP ENCLOSURE WORK LIGHTS

Work lighting shall be provided inside the pump enclosure providing a minimum of 20 candlepower illumination.

ENGINE COMPARTMENT WORK LIGHTS

Work lighting shall be provided inside the engine enclosure that will provide a minimum of 20 candlepower illumination.

COMPARTMENT LIGHTS

Each exterior compartment shall have one (1) 18" LED strip style light. Each light shall come on automatically when the respective door is opened and the master battery switch is on.

SCOTCH-LITE STRIPE

A 4" white Scotch-Lite reflective strip with 1" white strip on each side shall be applied to the apparatus; The stripe shall be applied on a minimum of 60 percent of each side of the

unit, 60 percent on the rear of the unit and 40 percent on the front of the unit. The Scotch-Lite stripe layout shall be determined by the Fire Department.

The Scotch-Lite shall be white in color.

FRONT CAB LETTERING

The front cab lettering shall be completed by the fire department after delivery of apparatus.

MISCELLANEOUS HARDWARE

One bag of miscellaneous hardware shall be supplied with the finished apparatus. This hardware shall consist of nuts, bolts, screws, washers, etc. used in the manufacture of the apparatus.

REAR VISION CAMERA

There shall be one (1) CabCAM Wired Video System provided which includes 7" Monitor and 1 Camera. Waterproof Camera: CCD Color with Audio, 28 Infrared Illuminators Allow up to 32 feet of Visibility in the Dark, Image Mirroring Function, Made to Withstand Off-Road Conditions. In cab 7" Color TFT LCD Monitor: Embedded Control Box for Direct Power Input for Cameras, AV2 Video Input for DVD/ VCR, AV1 and AV3 Video Input to Hook up to 3 Cameras.

The rear vision camera system shall be wired to automatically activate when the chassis transmission is placed in reverse.

GENERAL WARRANTY {ONE YEAR}

A one (1) year new vehicle warranty will be provided, upon delivery and acceptance of the vehicle. The warranty will ensure that the vehicle has been manufactured to the contract specifications and will be free from defects in material and workmanship that may appear under normal use and service within the warranty period. The warranty may be subject to different time and mileage limitations for specific components and parts. This warranty is issued to the original purchaser of the vehicle.

The warranty will not apply to any parts or components that are warranted directly by their manufacturers. The warranty will not apply to routine maintenance requirements as described in the service and operator's manual. No warranty whether expressed, implied, statutory or otherwise including, but not limited to any warranty of merchantability or fitness for purpose will be imposed.

The manufacturer or representative will be notified in writing within the warranty period of any failure of the vehicle to comply with the specified warranty. If requested, the purchaser will promptly return the apparatus, component or part to the manufacturer for inspection of any defect in material or workmanship occurring within the applicable time limits.

The manufacturer will either repair or replace any defective components or parts. Repair or replacement of the defective item will be at the sole discretion of the manufacturer. The Basic Vehicle Warranty covers all components and parts unless specifically covered

by other descriptions or otherwise excluded herein. Repair or replacement of components will be done without cost to the purchaser when performed within the warranty period. Warranty repairs will not constitute an extension of the original warranty period, either for the entire apparatus or any specific components or parts.

The warranty will be inclusive and in lieu of all other warranties whether written, oral or implied, including but not limited to any warranty of merchantability or fitness for purpose. The warranty will be void and the manufacturer will not be obligated to repair or replace any component or part where the necessity of such replacement or repair, in the opinion of the manufacturer, is due in whole or in part to loads in excess of factory rated capacities, modification or alteration, accident or other misuse or abuse of the vehicle. In no event will the manufacturer be liable for special or consequential damages including but not limited to injuries to persons or damage to property or loss of vehicle use.

The apparatus will be maintained and serviced, by the purchaser, according to the prescribed schedules outlined in the operators and service manuals. As a condition of the warranty the manufacturer may require that receipts or other evidence be provided to verify that maintenance and service has been performed.

CORROSION WARRANTY

The proposed body will be warranted against rust-through or perforation, due to corrosion from within, for a period of ten (10) years. Perforation is defined as a condition in which an actual hole occurs in a sheet metal panel due to rust or corrosion from within. Surface rust or corrosion caused by chips or scratches in the paint are not covered by this warranty.

PAINT FINISH WARRANTY

The proposed paint finish will be warranted for a period of seven (7) years from the date of acceptance of the unit. Details of warranty coverage, limitations and exclusions are included in the specific warranty document.

WATER TANK (LIFETIME)

The proposed water tank will be warranted by the water tank manufacturer for the lifetime after in service date. A copy of the manufacturer's warranty will be supplied to define additional details of the warranty provisions.

HALE FIRE PUMP (FIVE YEAR)

The proposed Hale fire pump will be warranted by the pump manufacturer for a period of Five (5) years. The warranty will cover replacement parts and labor for the warranted components. A copy of the manufacturer's warranty will be supplied to define additional details of the warranty provisions.

DIMENSIONS

The completed apparatus shall be 9'11" or less in height.

